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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,282	10/30/2001	Bruno Gailhard	00RO27354348	8892

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EXAMINER

KINKEAD, ARNOLD M

ART UNIT	PAPER NUMBER
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2817

DATE MAILED: 06/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/021,282

Applicant(s)

GAILHARD ET AL.

Examiner

Arnold M Kinead

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on preliminary amendment.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

The preliminary amendment filed 10/31/01 has been entered.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The corrected or substitute drawings were received on 02-06-02. These drawings are approved.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 18-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The following lack proper antecedent basis:

In claim 18, line 10, " the control number" , see line 16 too.

In claim 20, line 4, " the control number" .

In claim 23, line 2, " the control number" .

In claim 24, line 5, " the control number" .

In claim 25, line 3, " the control number" , and on the last line, " the control number" .

In claim 26, line 3, " the control number" , and on the last line, " the control number" .

In claim 28, line 10, " the first control signal" .

In claim 30, line 6, " the second period" .

In claim 36, line 26, " said first and second groups" .

In claim 41, line 10, " the first control signal" ,

In claim 42, line 6, " the second control signal" ,

In claim 43, line 8, " the control number" .

In claim 44, " the least significant bits" , and " the control number" .

In claim 48, line 15, " the providing" , and on line 22, " the first and second groups" .

In claim 52, line 2, " the control number" .

In claim 53, lines 3 and 4, " the desired period" .

The dependent claims from the above are indefinite too by virtue of their dependence.

Claim Rejections - 35 USC § 102

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 18,21,24,43,45,48,50, and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Arai(US 5,490,182).

The reference by Arai discloses a signal generator(see figure 1) with a ring oscillator being controlled by an UP/DOWN counter(60) with N-bit control word. This control signal has most significant bits(C6-C10) and least significant bits(LSBs C4-C1). Note that a decoder is connected to the MSBs,i.e., (25,22,21 and selectors); another decoder(70) is connected to the LSBs(C4-C1).

A first group of cells, each having at least one inverter, is shown, for example, (2, 5), with first selection circuit(15) connected to said first group of cells and controlled by one of the MSBs(C10).

A second group of cells(1,7), each having at least one inverter, with second selector(17) connected to the second group of cells and controlled one of the LSBs(C1). See table 1, and col. 4, line 25-col. 6., line 28. The selected cells form a chain of inverters in a ring.

Note, depending on the logic values as shown in table 1, the propagation times(due to the number of delaying inverters forming the ring) may differ due to the selection/non-selection of the particular cell.(claims 21,45,50)

A phase comparator 30 is shown for determining leading/lagging relationship between the period of the ring oscillator output signal and the desired reference (S3, input reference) so as to increase/decrease the counter(see cols.7-8)

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and thus change the control number and thus the oscillator cells. As noted in col. 8, lines 55-62, the count is essentially constant when there is a convergence of the two signals in phase.(claims 24,53) The method steps being inherent.

Allowable Subject Matter

7. Claims 36-42 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

8. Claims 19,20,22,23,25,26,27,28,29,30-35, 44,46,47, and 49,51,52 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The examiner could not find fair suggestion fro place value selection... with switches as well as the inequality verification. Also, a first measurement oscillator and a second measurement oscillator were not suggested.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnold M Kinhead whose telephone number is 703-305-3486. The examiner can normally be reached on Mon-Fri, 8:30 am -5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner' s supervisor, Robert Pascal can be reached on 703-308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

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A handwritten signature in black ink, appearing to read 'A. Kinkead', written over the printed name.

Arnold M Kinkead

Primary Examiner

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Arnold Kinkead

June 2, 2003